REMARKS

INTRODUCTION

In accordance with the following, reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-24 are pending, with claims 1-6, 16-18, 21, and 23 under consideration.

REJECTION UNDER 35 USC 103

Claims 1-6 and 16-18 stand rejected under 35 U.S.C. 103(a) as being obvious over Klinefelter et al., U.S. Patent Publication 2001/0024225, to in view of Witczak, U.S. Patent No. 4,759,286, and Olowinski, U.S. Patent No. 3,942,314. This rejection is respectfully traversed.

By way of review and as an example, claim 1 sets forth

"[a] feeding roller shaft supporter for an ink-jet printer having a feeding roller shaft, comprising:

a main chassis which forms a frame of an ink-jet printer;

a first supporting unit in the main chassis supporting opposite ends of the feeding roller shaft;

a driving member provided at a first end of the feeding roller shaft;

an axial position correction unit mounted on the feeding roller shaft close to the driving member, correcting an axial position of the feeding roller shaft; and

a second supporting unit supporting the feeding roller shaft, wherein the second supporting unit is provided on a second end of the feeding roller shaft, preventing the shaking of the feeding roller shaft caused by thrust when the feeding roller shaft rotates."

The Office Action relies on Klinefelter et al. to disclose the claimed main chassis, first supporting unit, and driving member.

Presumably, the Office Action is referring to motorized lower guide roller 74 of Klinefelter et al., as Klinefelter et al. refers to this roller as being motorized. See paragraph [0033].

FIG. 4 of Klinefelter et al. further illustrates roller orientations, including the support mechanism for the rollers. In particular, Klinefelter et al. details that the roller can be supported by two bushings 75.

This arrangement is similar to FIG. 2 of the present specification, having stationary pieces 11 and 12, each with bushings.

Embodiments of the present invention further define that the such bushings are embodied in the first supporting unit. The independent claims also particularly claim the first supporting unit "supporting *opposite ends* of the feeding roller shaft."

In Klinefelter et al., the first supporting unit would, thus, correspond to the two bushings 75 in FIG. 4 of Klinefelter et al., especially since this is the only illustrated supporting mechanism.

Accordingly, with that in mind, the remaining rejection remarks are addressed.

To disclose the claimed axial position correction unit "mounted on the feeding roller shaft close to the driving member," the Office Action relies on Witczak. In particular, the Office Action merely indicates that Witczak teaches an axial position correction unit mounted on the shaft of a roller, correcting an axial position of the shaft," and that it would have been obvious to combine the same with Klinefelter et al. "in order to have more control over the axial positioning of the shaft."

However, Witczak merely sets forth a mechanism for easy release of rollers, wherein a shaft can be removed easily from bracket supports. As illustrated in FIG. 3, the rollers of Witczak each have shafts that end with bearings 42 on the shaft end 40. The shaft end 40 can be matched with bracket assembly 44 and locked or unlocked by a latch that can easily be moved from the locked or unlocked position. See FIGS. 4 and 5.

Witczak briefly mentioned in col. 5 that cylindrical pins 70 can be included in the pin head structure 46 of the bracket assembly 44, such that loosening or tightening of screws 74 can move the cylindrical pins axially to contact bearings 42 on the shaft end 40.

Thus, contrary to the discussion in the Office Action, any axial position correction unit disclosed by Witczak is designed to be implemented outside of the shaft extents, i.e., **beyond the "ends" of the shaft defined by the aforementioned first supporting unit**.

In addition, independent claims 1 and 16 particularly claim that the axial position correction unit is located close to the driving member. There is no indication in Witczak or Klinefelter et al. that any axial position correcting is performed near the driving member.

Therefore, even if the axial position correction unit of Witczak were modified into Klinefelter et al., it would only be implemented to control the axial orientation of the shaft from the outside of the shaft.

Regarding the claimed second supporting unit, supporting the feeding roller shaft, the

Office Action has referenced col. 2, line 55, through col. 3, line 22, of Olowinski, to teach "a shaft having a second supporting unit provided on a second end supporting the shaft in an axial direction."

Olowinski sets forth an mounting arrangement for a spindle, wherein the spindle is mounted to a surface by both compressing the spindle against a top of a surface and supporting a shaft of the spindle below the surface. The portion of the shaft supported below the surface are supported by a rigid inner member 28, support ring 32, and an elastomeric annulus 44, for example. See FIG. 2 of Olowinski.

As illustrated in FIG. 1, the invention of Olowinski solves a problem with the conventional spindle moving/tilting.

However, the arrangement of the shaft in Klinefelter et al. is not that of a spindle with a free end, but of two supported ends, i.e., the claimed ends of the claimed first supporting unit.

The Office Action indicates that it would have been obvious to modify Klinefelter et al. to include the arrangement of Olowinski "to reduce the vibration in the shaft with the roller is operated."

However, it is not clear how the system of Olowinski would translate or correspond to a completely different system of two supported ends. Further, if Klinefelter et al. already has a supported end (bushing 75), it is not clear how the teaching of Olowinski would be incorporated into Klinefelter et al.

In addition, in Olowinski, the drive mechanism is before the mounted end of the shaft, i.e., Olowinski is similar to Witczak in that they both describe operations of supporting shafts outside of the rotating shaft.

Similarly, in Olowinski, the mounted end is attached to the end of the shaft including the driving unit, while independent claims 1,16, and 21 claim that the second supporting unit is provided on a second end of the shaft (opposite the end including the drive unit).

In particular, the arrangement and solution provided by Olowinski would appear to be directed toward solving problems deriving from the driving unit being next to the corresponding supported end, while the independent claims particularly claim the opposite.

Therefore, it is respectfully submitted that it would not have been obvious to modify Klinefelter et al. to include the mounting system of Olowinski.

Lastly, regarding claims 3, 4, and 17, it is noted that the Office Action has indicated that

"an apparatus will always have a predetermined interval between any two given elements so it would be inherent for this to be the case between the elements of Klinefelter et al."

However, the Office Action has failed to point to any portion of Klinefelter et al. providing any indication of where the driving unit would be oriented in respect to the interpreted first supporting unit, noting that the claims particularly define that the driving unit does not come into contact with the first supporting unit because of this "predetermined interval."

Conversely, the present application particularly details that conventionally the driving unit was directly adjacent to the first supporting unit, and therefore, the Office Action cannot reasonably make the conclusion that the opposite would be inherent in Klinefelter et al., without supporting evidence of the same.

According to the above, it is respectfully submitted that the operations and systems of Olowinski and Witczak are directed to different problems and arrangements, not relevant in the system of Klinefelter et al.

It is respectfully submitted that it would not have been obvious to modify Klinefelter et al. to include the proffered features of Olowinski and Witczak, and further submitted that even if the same were modified into Klinefelter et al. the combination still would not disclose the claimed invention.

Claims 21 and 23 stand rejected under 35 U.S.C. 103(a) as being obvious over Klinefelter et al. in view of Olowinski. This rejection is respectfully traversed.

It is respectfully submitted that the above discussion regarding Klinefelter et al. and Olowinski are equally applicable herein. Again, it is respectfully submitted that it would not have been obvious to modify Klinefelter et al. as proffered.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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